Sample Input Data

Adding Airports

1. Airport Code: JFK

2. Airport Code: LAX

3. Airport Code: ATL

4. Airport Code: ORD

5. Airport Code: DFW

6. Airport Code: DEN

7. Airport Code: SFO

8. Airport Code: SEA

Adding Flights

1. Origin: JFK Destination: LAX Distance: 2475

2. Origin: JFK Destination: ATL Distance: 760

3. Origin: ATL Destination: LAX Distance: 1946

4. Origin: ATL Destination: ORD Distance: 606

5. Origin: ORD Destination: DFW Distance: 802

6. Origin: DFW Destination: DEN Distance: 641

7. Origin: DEN Destination: SFO Distance: 967

8. Origin: SFO Destination: SEA Distance: 679

9. Origin: LAX Destination: SEA Distance: 954

10. Origin: LAX Destination: DFW Distance: 1235

11. Origin: JFK Destination: SFO Distance: 2586

Finding Routes

• Start Airport Code: JFK

Destination Airport Code: SEA

• Maximum Number of Layovers: 2

Sorting Preference

Sort by total travel distance: 1

• Sort by number of layovers: 2

Sample Input Sequence

1. Add airport: JFK

2. Add airport: LAX

3. Add airport: ATL

4. Add airport: ORD

5. Add airport: DFW

6. Add airport: DEN

7. Add airport: SFO

8. Add airport: SEA

Add flight:

• Origin: JFK

• Destination: LAX

• Distance: 2475

• Add flight:

Origin: JFK

• Destination: ATL

• Distance: 760

• Add flight:

• Origin: ATL

• Destination: LAX

• Distance: 1946

• Add flight:

• Origin: ATL

• Destination: ORD

• Distance: 606

Add flight:

• Origin: ORD

Destination: DFW

• Distance: 802

• Add flight:

• Origin: DFW

• Destination: DEN

• Distance: 641

• Add flight:

Origin: DEN

• Destination: SFO

• Distance: 967

• Add flight:

• Origin: SFO

• Destination: SEA

• Distance: 679

• Add flight:

• Origin: LAX

• Destination: SEA

• Distance: 954

• Add flight:

• Origin: LAX

• Destination: DFW

• Distance: 1235

• Add flight:

• Origin: JFK

• Destination: SFO

• Distance: 2586

Find routes:

• Start Airport Code: JFK

• Destination Airport Code: SEA

• Maximum Number of Layovers: 2

• Sort by total travel distance: 1

• Sort by number of layovers: 2

Expected Output

When you run the interactive menu and input the data as described, you should get a list of routes from JFK to SEA sorted by either total travel distance or number of layovers.

The routes might include paths like:

- JFK -> LAX -> SEA
- JFK -> ATL -> LAX -> SEA
- JFK -> ATL -> ORD -> SEA

You can choose the sorting preference after finding the routes to see the sorted output based on either total travel distance or number of layovers.